Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

NOTICES FROM THE LICK OBSERVATORY.*

PREPARED BY MEMBERS OF THE STAFF.

DISCOVERY OF A NEW ASTEROID, 1899 FD, WITH THE CROSSLEY REFLECTOR.

The region of HINDS's variable nebula in *Taurus* was photographed with the Crossley reflector on the night of December 6, 1899, with an exposure of four hours, and on the negative, when it was examined the next morning, there was found a very fine faint line, which was recognized as the trail of an asteroid.

Owing to a defect in the film, the position of the asteroid could not be determined accurately on the first plate, and another photograph was made on the night of December 9th. The next observation was made on December 26th. From these two positions, circular elements were computed by Mr. CODDINGTON. These elements represented the motion of the asteroid with much accuracy, owing to the fact, subsequently discovered, that the eccentricity of the orbit is very small.

As the telescope was constantly in use for other purposes, a third observation was not obtained until the night of January 19th. On this night the 36-inch refractor was available for visual observations, and a search was made for the asteroid with the aid of the photograph just taken. It was, however, not certainly visible, and its magnitude was taken to be 17.

The following positions were deduced from measurements of the plates by Mr. CODDINGTON and Mr. PALMER :

1899–00.	Mt. H. Mean Time.	App. R. A.	App. Dec.
Dec. 9.	$9^h\ 29^m\ 36^s$	$4^h\ 13^m\ 52^s.58$	$+19^\circ\ 14'\ 51''.9$
26.	8 11 22	4 1 11.01	+19 2 22.2
Jan. 19.	7 53 35	3 54 49.32	+19 15 30.7

From these observations the following elliptic elements were computed by Mr. PALMER, and independently by Mr. PHIPPS, of the Students' Observatory, Berkeley.

---

* Lick Astronomical Department of the University of California.

Epoch, 1900 Jan. 0.0, Berlin M. T.

$M = 296^\circ\ 42'\ 7''.9$ $\phi = 1^\circ\ 13'\ 23''.3$
$\omega = 46\ \ 39\ \ 31.5$ $\mu = 736''.622$
$\Omega = 92\ \ 44\ \ 39.0$ $\log a = 0\ 455174$
$i = 3\ \ 13\ \ 15.8$ $m_0 = 16.7$ $g = 13.1$

The values of M and ω are subject to considerable uncertainty, on account of the small eccentricity. The asteroid is the smallest that has yet been found. J. E. K.

NEW DOUBLE STARS.

My search for new double stars has resulted in the finding of thirty-seven new pairs (all under 5″) in the first four months of the present year. Twenty-five of these have distances of less than 2″, thirteen are under 1″, and five of them are very close. In general the 12-inch has been used for this work, but on two or three nights when the seeing did not admit of the use of high powers, some sweeping was done with the 36-inch telescope.

A few of the pairs found possess sufficient interest to warrant their publication here in advance of the complete list. These are:—

A. G. Cambridge 2997.

$6^h\ 3^m\ 22^s\ +29^\circ\ 15'$.

1900.201	343°.6	0″.58	7.5 – 8.5	3	12
.204	344 .0	0 .58	7.5 – 9.0	3	12
.209	348 .3	0 .46	7.5 – 8.5	3	36
.291	342 .4	0 .49	7.5 – 8.5	3	36
1900.23	344°.6	0″.53	7.5 – 8.6		

Found with the 12-inch on March 14th, while looking for the following star:—

A. G. Cambridge 3025.

$6^h\ 5^m\ 20^s\ +28^\circ\ 47'$.

1900.190	284°.8	0″.43	9.0 – 9.5	3	36
.193	288 .4	0 .52	8.7 – 9.3	3	36
.209	293 .3	0 .52	8.5 – 9.2	3	36
1900.20	288°.8	0″.49	8.7 – 9.3		

Found with the 36-inch on March 10th.